

REMARKS / ARGUMENTS

This application is believed to be in condition for allowance because the claims are believed to be non-obvious and patentable over the cited references. The following paragraphs provide the justification for this belief. In view of the following reasoning for allowance, the Applicant hereby respectfully requests further examination and reconsideration of the subject patent application.

1.0 Rejections under 35 U.S.C. §112:

In the Office Action of January 15, 2008, claims 1-21 were rejected under 35 U.S.C. §112, as 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. In general, the Office Action argues that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

More specifically, the Office Action first argues that the limitations of “said expected arrival time representing a predetermined packet late loss time” and “specifying a maximum delay period, extending past the expiration of the expected arrival time, for any missing data packets” as set forth in independent claims 1 and 8 “...are not disclosed by Applicants’ originally-filed Specification.”

The Office Action further argues that the “Specification does not set forth at least ***both an expected arrival time representing a predetermined packet late loss time, and a maximum delay period extending past the expiration of the expected arrival time.***” Further, the Office Action admits on page 3-4 of the present Office Action that “All that is disclosed here is that a time period for declaring a ‘late loss’ is ***extended from a conventional late loss scheme...***” (emphasis added).

In contrast to the position advanced by Office Action, Applicants respectfully suggest that the limitations at issue in the present rejection are fully enabled by the specification as originally filed. However, since the Office Action believes that the term “expected arrival time” is not supported, Applicants have amended claims 1 and 8 to refer specifically to “...a predetermined **packet late loss time**...” instead of an expected arrival time.

As explained throughout the specification of the present application, “late loss” times are well known to those skilled in the art as a predetermined time when packets will be declared to be lost if not received. For example, as explained in paragraph [0077] of the present application, “...conventional stretching schemes... declaring a packet as a “late loss” ***when it is not received within a predetermined period of time***...” Note that the determination of late loss times is well known to those skilled in the art of network-based communications, and as such, the brief summary of these concepts presented in the present specification is sufficient for enablement with respect to the idea of late loss times and expected arrival times.

Next, as described throughout the specification, the claimed maximum delay period differs from the claimed predetermined packet late loss time, as representing an additional delay time following the claimed predetermined packet late loss time during which the claimed system may still wait to receive a missing packet before it is actually declared lost. In particular, claim 1 recites: “...specifying a maximum delay period, extending past the predetermined packet late loss time, for receiving any missing data packets...” It is important to note that the Office Action ***admits*** that this concept is disclosed, since, as noted above, the Office Action argues on page 3-4 “All that is disclosed here is that a time period for declaring a ‘late loss’ is ***extended from a conventional late loss scheme***...” (emphasis added). Claim 8 recites similar language.

Further, Applicants respectfully suggest that these concepts are fully supported by the specification as originally filed. For example, paragraph [0078] of the present application explains the following:

“In a tested embodiment, values for the delay time T on the order of about 20 ms to about 1 sec were used, with values of T around 100 ms typically providing good results.”

In other words, the specification, as originally filed disclosed the use of “delay times” on the order of about 20 ms to about 1 sec. The specification then further explained that delay times of around 100 ms typically provided good results in tested embodiments of the claimed system. Therefore, rather than determining the claimed delay period as a function of buffer level, the Applicants disclose a range of acceptable values which can be used.

Therefore, since the Applicants have amended independent claims 1 and 8 to replace the objected to language with language admitted as being disclosed by the present Office Action, Applicants respectfully request withdrawal of the rejections of claims 1 and 8, and of the claims dependent therefrom, under 35 U.S.C. §1112.

In particular, claim 1, as amended, recites the following novel language:

“A system for providing adaptive playback of an audio signal received across a packet based network, comprising:

storing data packets comprising a received audio data signal to a signal buffer;

outputting parts of the signal present in the signal buffer as needed for signal playback;

analyzing the data packets contained in the signal buffer to determine whether any data packets are missing, having not been received into the signal buffer by **a predetermined packet late loss time**;

specifying a maximum delay period, **extending past the predetermined packet late loss time**, for receiving any missing data packets;

following the predetermined packet late loss time, stretching at least part of the signal preceding the missing data packets present in the signal buffer, until any of receiving the missing data packets and exceeding the maximum delay period,

when the analysis of the contents of the signal buffer indicates that the length of the signal in the signal buffer is less than a predetermined threshold; and

compressing at least part of the signal present in the signal buffer when the analysis of the contents of the signal buffer indicates that the length of the signal in the signal buffer is greater than a predetermined threshold.” (emphasis added)

Similarly, claim 8, as amended, recites the following novel language:

A system for providing an adaptive playback of received frames of an audio signal transmitted across a packet-based network, comprising:

receiving and decoding data frames of an audio signal transmitted across a packet-based network;

storing the decoded data frames to a signal buffer;

analyzing the contents of the signal buffer to determine whether any data frames are missing due to corresponding data packets having not been received by **a predetermined packet late loss time**;

specifying a maximum delay period, extending past the predetermined packet late loss time, for receiving any missing data packets;

outputting one or more of the decoded frames present in the signal buffer when the analysis of the contents of the signal buffer indicates that the length of the signal in the signal buffer is between a predetermined minimum and a predetermined maximum buffer size;

following the predetermined packet late loss time, stretching and outputting one or more decoded frames preceding the missing data packets in the signal buffer, until any of receiving the missing data packets and exceeding the maximum delay period, when the analysis of the contents of the signal buffer indicates that the length of the decoded frames in the signal buffer is less than the predetermined minimum buffer size; and

compressing and outputting one or more decoded frames in the signal buffer when the analysis of the contents of the signal buffer indicates that the length of the

decoded frames in the signal buffer is greater than the predetermined maximum buffer size. (emphasis added)

CONCLUSION

In view of the above discussion, it is respectfully submitted that claims 1-21 are in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of claims 1-17, 19 and 21, and objection to claims 18 and 20, and to pass this application to issue at the earliest opportunity. Additionally, in an effort to further the prosecution of the subject application, the Applicant kindly invites the Examiner to telephone the Applicant's attorney at (805) 278-8855 if the Examiner has any additional questions or concerns.

Respectfully submitted,



Lyon & Harr
300 Esplanade Drive, Suite 800
Oxnard, California 93036
(805) 278-8855

Mark A. Watson
Registration No. 41,370
Attorney for Applicant